

# The impact of acetabular labral tears on sexual activity in women

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Submitted 26 September 2019; revised version accepted 21 October 2019

## ABSTRACT

A healthy sex-life is an important component of a good quality of life. However, sexual function may be inhibited in women with acetabular labral tears because of the labrum being caught between the femoral head neck junction and the acetabular rim during flexion and/or abduction of the hip. The aim of this article is to quantify the effect that acetabular labral tears may have on the sexual lives of women and to establish the extent to which they may be expected to resolve after arthroscopic intervention. The article also highlights the importance of including questions related to the impact on sexual activity as a routine part of our taking history for a young adult with hip pain, to gain a true appreciation of the impact the symptoms have on the day-to-day lives of our patients.

## INTRODUCTION

The acetabular labrum is a critical structure within the hip joint. Attached to the margin of the acetabulum, the labrum is a soft-tissue fibrocartilaginous structure that acts to deepen and increase surface area of the hip joint. Closely related to the acetabular articular cartilage, the functions of the labrum include creating a seal that maintains synovial fluid pressure, improving joint lubrication and creating a suction effect around the femoral head to improve joint stability [1].

Labral tears are a common cause of hip pain and are commonly associated with femoroacetabular impingement (FAI) [2]. It is also well-known that majority of patients with labral tears are female with a mean age at presentation of 38 years [3]. The hip movement that commonly triggers symptoms in patients with a labral tear is deep flexion with rotation. In women, hip flexion over  $>100^\circ$  and rotation occurs in a number of sexual positions [4], giving a potential for women with labral tears to experience pain during and after sexual activity. This has also been studied using a virtual model of patients with FAI [5] and it has been shown that impingement of the femur occurs on the

acetabulum which leads to an increase in the stress on the labrum during movements involving sexual activity.

Sexual function is an important component of patient-focused health-related quality of life [6]. In patients undergoing hip arthroscopy for FAI, the majority reported difficulties with sex due to their hip condition [7]. Despite sex being a normal activity for most individuals, due to the sensitive and rather personal nature of the subject, patients are unlikely to volunteer this information during a consultation unless asked directly. Furthermore, orthopaedic surgeons find it difficult to ask patients directly about symptoms during sexual activity in the outpatient setting [8]. As a result, we may be grossly underestimating the impact on lifestyle and functional limitations that a labral tear may be imparting on women.

The effect of a total hip replacement (THR) on sexual activity has been reported well in literature. It is well-known that women awaiting a THR more frequently complained of symptoms during sex than men [9], with pain more than stiffness, being the predominant symptom. Importantly, for patients undergoing hip replacement surgery, the treatment has been shown to improve the

frequency at which hip symptoms occur during sexual activity. A systematic review including 1694 patients from 9 studies explored the effect of THR on sexual activity [10] concluding that having a THR is associated with improved sexual activity. They reported that post-operatively 44% of the patients reported sexual satisfaction, 27% reported increased frequency of intercourse with patients returning to sexual activity at a mean of 4 months after a THR.

In younger (<60 years) patients undergoing a THR, a significant percentage of women had expectations that after hip surgery they would have increased sexual frequency (47%) and a change in sexual practice (68%), with 12% achieving increased frequency post-operatively and 38% describing better ability during sexual activity [11].

On the other hand, although women with labral tears tend to have a younger age demographic than those undergoing a THR, the literature on the effect of labral tears on the sex lives of women is negligible. To address this, we evaluated the effect of symptomatic labral tears on the sex lives of women and the effect of surgical intervention on the resolution of hip symptoms during sexual intercourse [12].

A questionnaire was sent to 120 women (a consecutive series) who had undergone hip arthroscopy for symptomatic labral tears. Combining postal and telephone contact, responses were received from 104 women. Specific questions were asked on the nature of symptoms during sexual activity: whether they had experienced hip symptoms during sexual intercourse and the impact on their sex lives any of these symptoms had had. Of the 88% who were sexually active 94% reported hip pain during sex, with 20 women stating that their hip symptoms during sex were largely positional, occurring when the hip was in a flexed or abducted position. Hip pain continued for a few days following sexual intercourse in eight women, with four women reporting that they were often not able to continue sexual activity because of their hip symptoms. This suggests that for women with labral tears their sexual function is significantly impacted because of their hip condition, having the well-described negative effect on their overall quality of life.

Questions on the degree of resolution of hip symptoms during sexual activity following arthroscopic treatment of the labral tear revealed that for the women who had hip pain during sexual intercourse pre-operatively, 89% had an improvement in these symptoms post-operatively, though a significant number did report that they had some residual hip symptoms during sexual activity. In this cohort, there were no patients who suffered complications such as heterotopic ossification (that may limit range of movement of the hip) or nerve injury. Injury to the pudendal nerve is an

infrequent but recognized complication of hip arthroscopy and notably associated with the use of a perineal post [13]. Pudendal nerve injury can cause neuralgia with dysaesthesia in the area of skin supplied by the nerve and is associated with sexual dysfunction [14]. Though not reported in our series, this may be a potential cause of lack of improvement in sexual function after hip arthroscopy.

Our experience was that, when asked specifically, patients were surprisingly forthcoming about the impact of their hip symptoms on their sex lives. As clinicians we may feel uncomfortable addressing issues of such a personal nature and so tend to avoid them. But in doing so, we are likely underestimating the functional disability caused by labral tears in young women. We are also aware of patients who have successfully conceived following hip arthroscopy for labral pathology, however we have not evaluated whether the desire to start a family prompts women to opt for surgical intervention. This would provide a direction for further study.

Finally, in order to gain a true appreciation of the impact the symptoms of labral tears are having on the day-to-day lives of our patients, we need to ensure that questions related to the impact on sexual activity form a routine part of our taking history for a young adult with hip pain.

#### CONFLICT OF INTEREST STATEMENT

None declared.

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